

What we claim is:

1. An article comprising a machine-accessible medium having stored thereon instructions that, when executed by a machine, cause the machine to:

measure power usage on the machine;

in response to a measured quantum of power usage, sample state data of the machine.

2. The article of claim 1, having further instructions that, when executed by the machine, cause the machine to:

provide the sampled state data to a performance analysis module.

3. The article of claim 1, wherein the machine has a power measurement module.

4. The article of claim 3, wherein the machine comprises a plurality of subsystems and wherein the power measurement module is coupled to at least one of the plurality of subsystems for measuring power usage of the at least one of the plurality of subsystems.

5. The article of claim 4, having further instructions that when executed on the machine, cause the machine to:

measure power usage of at least one of the plurality of subsystems.

6. The article of claim 5, wherein the at least one of the plurality of subsystems includes a network subsystem, a graphics display subsystem, or a data storage subsystem.

7. The article of claim 5, wherein the at least one of the plurality of subsystems includes an input/output device or an expansion slot subsystem.

8. The article of claim 1, wherein the state data is a program counter.

9. The article of claim 8, wherein the state data comprises a program counter, status of the machine, status of at least one subsystem of the machine, status of at least one component of the machine, or status of at least one functional unit embedded in a subsystem.

10. A method of profiling code executable on a machine, comprising:

measuring power usage on the machine;

in response to a measured quantum of power usage, sampling state data on the machine.

11. The method of claim 10, wherein the machine comprises a plurality of subsystems, and wherein measuring power usage comprises measuring power delivered to at least one of the plurality of subsystems.

12. The method of claim 10, wherein the machine comprises a plurality of subsystems, measuring power usage comprising measuring power consumed by at least one of the plurality of subsystems.

13. The method of claim 10, wherein the machine comprises a plurality of subsystems and a power measurement module capable of measuring current or power delivered to at least one of the plurality of subsystems.

14. The method of claim 13, wherein the at least one of the plurality of subsystems includes a network subsystem, a graphics display subsystem, or a data storage subsystem.

15. The method of claim 13, wherein the at least one of the plurality of subsystems includes an input device or an expansion slot device.
16. The method of claim 10, further comprising:  
providing power to the machine.
17. The method of claim 10, further comprising:  
providing the sampled state data to a performance analyzer.
18. The method of claim 10, wherein the state data is a program counter.
19. The method of claim 10, wherein the state data comprises a program counter, status of the machine, status of at least one subsystem of the machine, status of at least one component of the machine, or status of at least one functional unit embedded in a subsystem.
20. An apparatus comprising:  
a power measurement module;  
a power sampling module coupled to the power measurement module for sampling state data of the apparatus in response to a power usage metric measured by the power measurement module.
21. The apparatus of claim 20, further comprising a power source.
22. The apparatus of claim 20, wherein the power usage metric is a quantum of power used on the apparatus.
23. The apparatus of claim 20, wherein the state data comprises a program counter, status of the machine, status of at least one subsystem of the machine, status of at least one component of the machine, or status of at least one functional unit embedded in a subsystem.